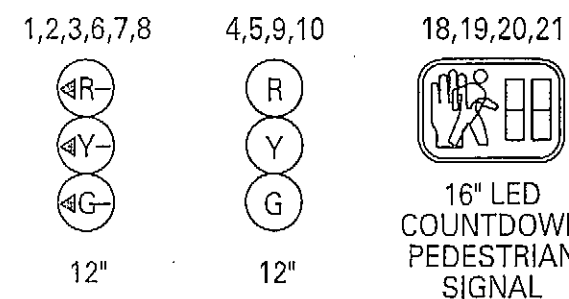
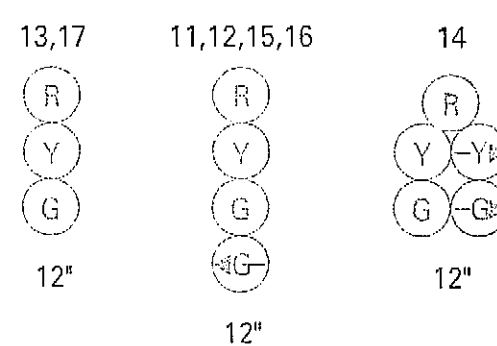


NOTE: MD 26 (LIBERTY ROAD) IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

PROPOSED LED SIGNALS



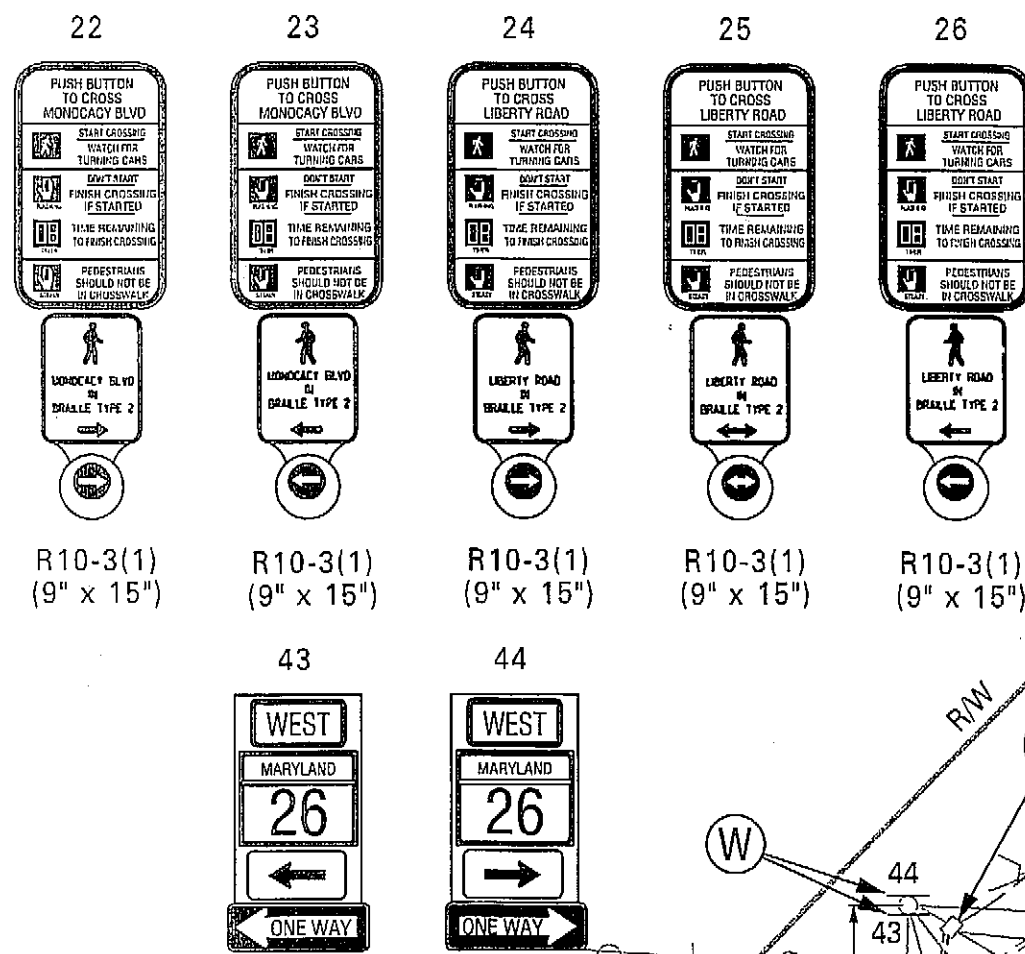
EXISTING LED SIGNALS



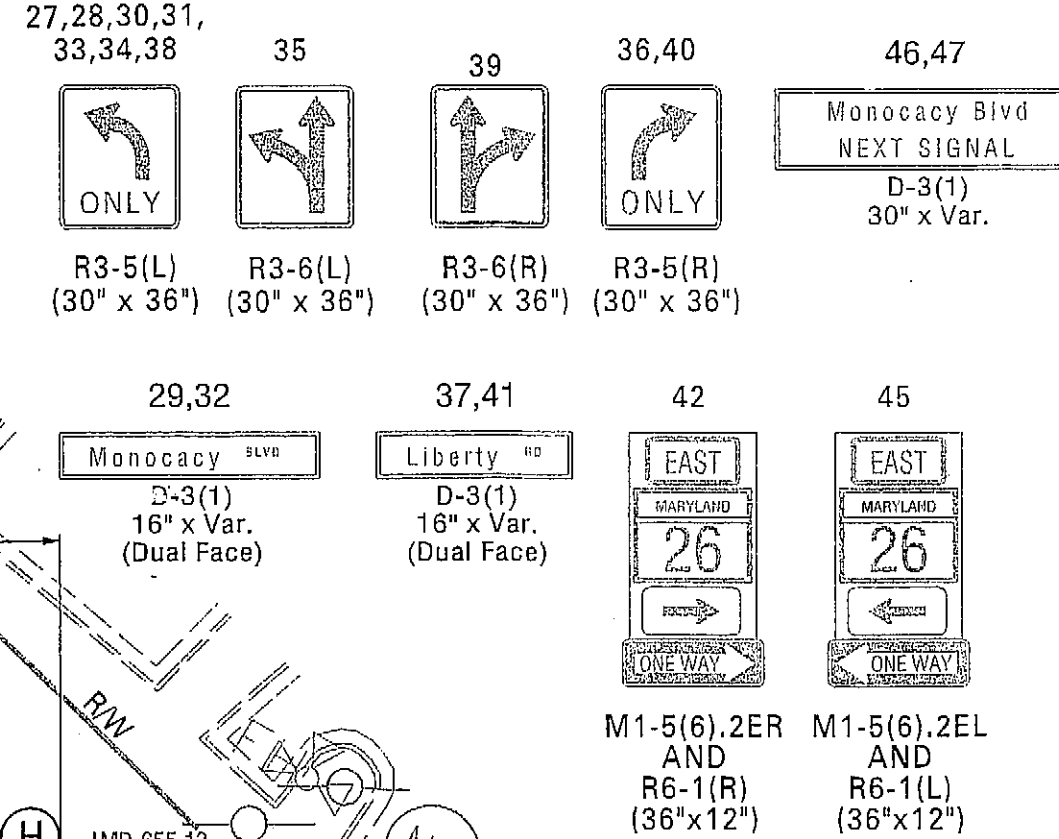
PROPOSED VIDEO DETECTION

a, b, c, d

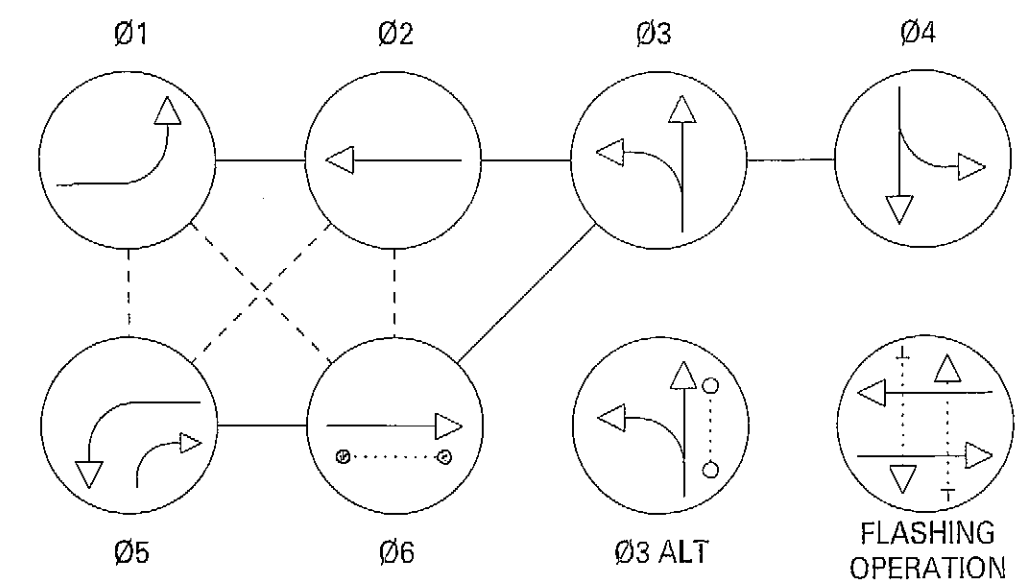
PROPOSED SIGNS



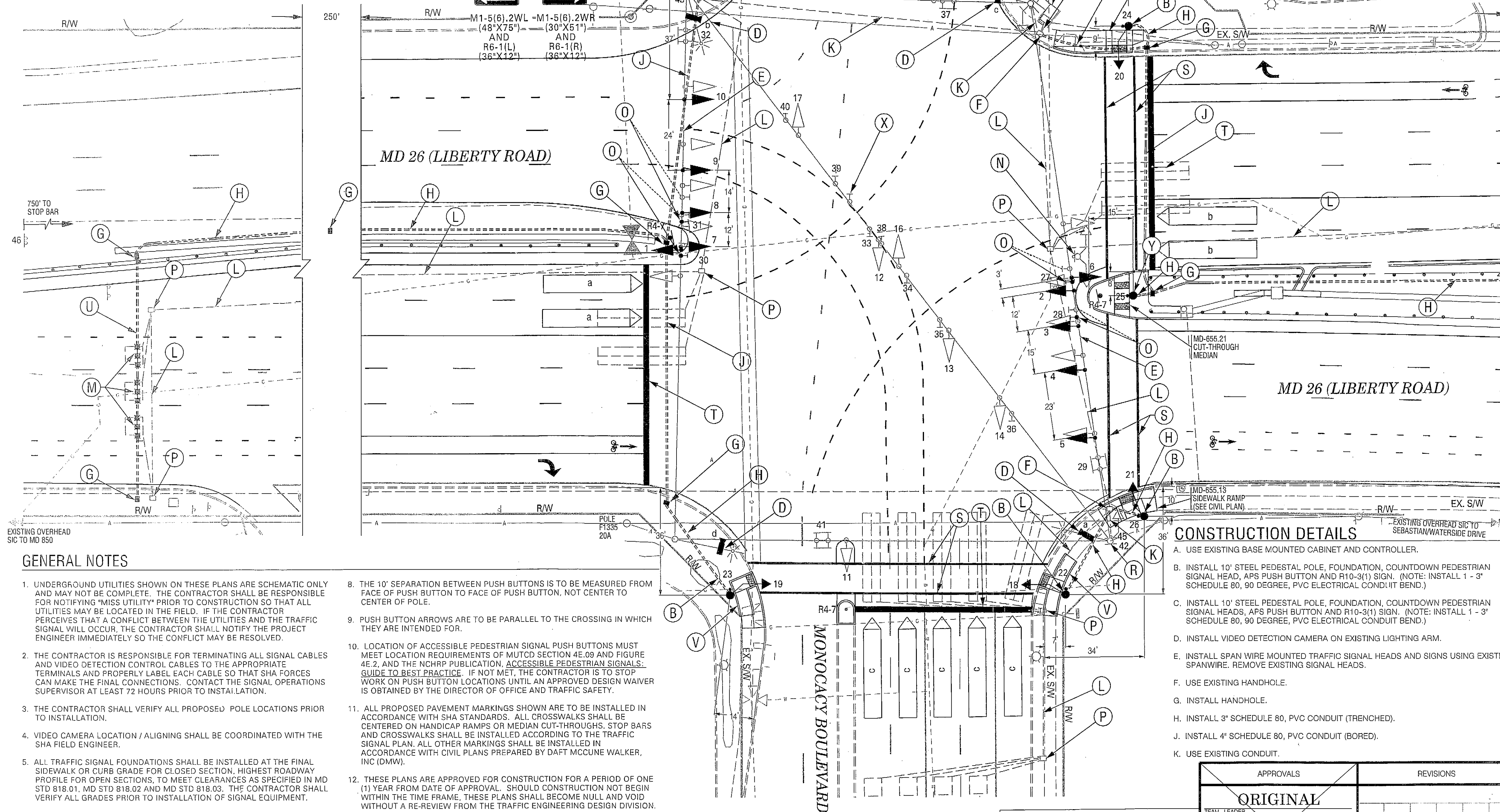
EXISTING SIGNS



NEMA PHASING



PHASING NOTES:
1) PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY
2) PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY



GENERAL NOTES

- UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THE CONFLICT MAY BE RESOLVED.
- THE CONTRACTOR IS RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES AND VIDEO DETECTION CONTROL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE SO THAT SHA FORCES CAN MAKE THE FINAL CONNECTIONS. CONTACT THE SIGNAL OPERATIONS SUPERVISOR AT LEAST 72 HOURS PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
- VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA FIELD ENGINEER.
- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTION, HIGHEST ROADWAY PROFILE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD STD 818.01, MD STD 818.02 AND MD STD 818.03. THE CONTRACTOR SHALL VERIFY ALL GRADES PRIOR TO INSTALLATION OF SIGNAL EQUIPMENT.
- ALL UNUSED SIGNAL CABLES SHALL BE REMOVED AND DISPOSED.
- PUSH BUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" x 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- THE 10" SEPARATION BETWEEN PUSH BUTTONS IS TO BE MEASURED FROM FACE OF PUSH BUTTON TO FACE OF PUSH BUTTON, NOT CENTER TO CENTER OF POLE.
- PUSH BUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING IN WHICH THEY ARE INTENDED FOR.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SECTION 4E.09 AND FIGURE 4E.2, AND THE NCHRP PUBLICATION, ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE. IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSH BUTTON LOCATIONS UNTIL AN APPROVED DESIGN WAIVER IS OBTAINED BY THE DIRECTOR OF OFFICE AND TRAFFIC SAFETY.
- ALL PROPOSED PAVEMENT MARKINGS SHOWN ARE TO BE INSTALLED IN ACCORDANCE WITH SHA STANDARDS. ALL CROSSWALKS SHALL BE CENTERED ON HANDICAP RAMPS OR MEDIAN CUT-THROUGHS. STOP BARS AND CROSSWALKS SHALL BE INSTALLED ACCORDING TO THE TRAFFIC SIGNAL PLAN. ALL OTHER MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH CIVIL PLANS PREPARED BY DAFT MCCUNE WALKER, INC (DMW).
- THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF ONE (1) YEAR FROM DATE OF APPROVAL. SHOULD CONSTRUCTION NOT BEGIN WITHIN THE TIME FRAME, THESE PLANS SHALL BECOME NULL AND VOID WITHOUT A RE-REVIEW FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.

CONSTRUCTION DETAILS

- USE EXISTING BASE MOUNTED CABINET AND CONTROLLER.
 - INSTALL 10" STEEL PEDESTAL POLE, FOUNDATION, COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSH BUTTON AND R10-3(1) SIGN. (NOTE: INSTALL 1 - 3" SCHEDULE 80, 90 DEGREE, PVC ELECTRICAL CONDUIT BEND.)
 - INSTALL 10" STEEL PEDESTAL POLE, FOUNDATION, COUNTDOWN PEDESTRIAN SIGNAL HEADS, APS PUSH BUTTON AND R10-3(1) SIGN. (NOTE: INSTALL 1 - 3" SCHEDULE 80, 90 DEGREE, PVC ELECTRICAL CONDUIT BEND.)
 - INSTALL VIDEO DETECTION CAMERA ON EXISTING LIGHTING ARM.
 - INSTALL SPAN WIRE MOUNTED TRAFFIC SIGNAL HEADS AND SIGNS USING EXISTING SPANWIRE. REMOVE EXISTING SIGNAL HEADS.
 - USE EXISTING HANDHOLE.
 - INSTALL HANDHOLE.
 - INSTALL 3" SCHEDULE 80, PVC CONDUIT (TRENCHED).
 - INSTALL 4" SCHEDULE 80, PVC CONDUIT (BORED).
 - USE EXISTING CONDUIT.
- L. CAP & ABANDON EXISTING CONDUIT.
M. INSTALL NON-INVASIVE MICROLOOP PROBE (SET OF THREE).
N. REMOVE EXISTING PEDESTAL POLE AND EQUIPMENT.
O. RELOCATE EXISTING SPAN WIRE MOUNTED SIGN.
P. REMOVE EXISTING HANDBOX AND BACKFILL.
R. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND PUSH BUTTON.
S. INSTALL 12" HEAT-APPLIED, WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE.
T. INSTALL 24" HEAT-APPLIED, WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
U. INSTALL 3" SCHEDULE 80, PVC CONDUIT (BORED).
V. REPLACE EXISTING WITH NEW MD 655.13 SIDEWALK RAMP TO MATCH EXISTING GRADE.
W. REMOVE EXISTING ONE WAY SIGNS. INSTALL NEW SIGNS TO EXISTING STRAIN POLE.
X. REMOVE EXISTING SPAN WIRE MOUNTED SIGN.
Y. INSTALL 5" STEEL PEDESTAL POLE, FOUNDATION, APS PUSH BUTTON AND R10-3(1) SIGN. (NOTE: INSTALL 1 - 3" SCHEDULE 80, 90 DEGREE, PVC ELECTRICAL CONDUIT BEND.)



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
**MD 26 (LIBERTY ROAD) AT
MONOCACY BOULEVARD**
FREDERICK, MARYLAND

APPROVALS	REVISIONS
TEAM LEADER ORIGINAL	
ASST. DIR. CHIEF ON FILE	
DIVISION CHIEF	
OFFICE DIRECTOR	

REVISIONS
1. CONSTRUCT 60' RIGHT TURN AND 3RD NB THRU LANE (TRANS. NO. 1000) JUNE 2012 BV1000M02
2. NG/JLS
3. D. INSTALL RIGHT-TURN OVERLAP FROM NB MONOCACY BLVD (T.I.M.S. NO. K726) AUGUST 2011 BV1000M02
4. CKO CTS RB MLP
5. C. ADD N/S SPLIT/USE SIDE STREET LANE CONFIGURATION NOVEMBER 2009 BV1000M02
6. ML/C

TRAFFIC SIGNAL PLAN	
SCALE 1" = 20'	DATE _____ CONTRACT NO. AW-456-501-785
DESIGNED BY _____	COUNTY FREDERICK
DRAWN BY D. DICKERSON	LOGMILE 10002601.08
CHECKED BY _____	T.I.M.S. NO. 3367E
F.A.P. NO. _____	TOD NO. _____
DRAWING NO. TS-3367-E	SHEET NO. 1 OF 2

WELLS + ASSOCIATES, INC.
TRANSPORTATION, TRAFFIC AND PARKING CONSULTANTS
210 Wit Street SW, Suite 201, Leesburg, Virginia 22075
Phone: 703/443-1442 Facsimile: 703/443-1225
1420 Spring Hill Road, Suite 600, McLean, Virginia 22102
Phone: 703/917-6820 Facsimile: 703/917-6738

PLOTTED: _____
FILE: L:\Projects\2001-5505\5504 - MD 26 - Signals\Design\Traffic Signal Plans\MD 26 at Monocacy Blvd TSD.dgn